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APPLICATION NO. FILING DATE 09/889,610 01/08/2002		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
		Mailvaganam Thavalingam Sivasithambaram Pillai	P0557/7045 DRW	
23628	7590 11/20/2003		EXAMINER	
	BENFIELD & SACK	ANTHONY, JOSEPH DAVID		
	ESERVE PLAZA TIC AVENUE		ART UNIT	PAPER NUMBER
BOSTON, MA 02210-2211			1714	

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	<u> </u>	Applicat	ion No.	Applicant(s)			
Office Action Summary		09/889,6	310	PILLAI ET AL.			
		Examine		Art Unit			
	_		D. Anthony	1714			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
	Responsive to communication(s) fi	led on					
•—	•	2b)☐ This action is	non-final.				
3)□	The second section and the second section and the second section as to the marity is						
Disposition	on of Claims						
	4) Claim(s) <u>1-37</u> is/are pending in the application.						
4	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
	6) Claim(s) is/are rejected.						
	r) Claim(s) is/are objected to.						
8)⊠	Claim(s) 1-37 are subject to restric	tion and/or election r	equirement.				
Applicati	on Papers						
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. §§ 119 and 120							
12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)  All b)  Some * c)  None of:  1.  Certified copies of the priority documents have been received.  2.  Certified copies of the priority documents have been received in Application No  3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.  a)  The translation of the foreign language provisional application has been received.  14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.							
Attachmen			A) 🗔 Inda - :: O	AV (PTO 413) Paper No(s)			
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review mation Disclosure Statement(s) (PTO-1449	(PTO-948) ) Paper No(s)		y (PTO-413) Paper No(s) Patent Application (PTO-152)			

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## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-11 and 24-37, drawn to carbonized vegetable-based materials and method of making and their use.

Group II, claim(s) 12-16, drawn to a method of improving the mechanical properties of bitumen by blending fresh and/or carbonized rice husk together with tyre crumb into said bitumen.

Group III, claim(s) 17-18, drawn to a method for improving the mechanical properties of thermoplastic resins by blending in fresh and/or carbonized rice husk

Group IV claim(s) 19-20 and 22-23, drawn to a method of improving the blowing character of rubber or method of improving the scorch time of rubber.

Group V, claim(s) 21, drawn to a method of reducing the cure time of ebonite NR by blending fresh rice husk into ebonite NR wherein said rice husk have a particle size of between 100 and 200 mesh.

2. The inventions listed as Groups I, II, III, IV and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature for Group I claims is "carbonized vegetable-based material". The claims of Groups II, III, IV and IV do not require the blending of a "carbonized vegetable-based material" since fresh rice husk may be used instead. The special technical feature of Group II claims is the blending of "fresh and/or carbonized rice husk together with tyre crumb". The claims of Groups III, IV and V have no requirement for the use of tyre crumbs in their methods. The special technical feature of Group III claims is blending "fresh and/or carbonized rice husk having a particle size between 325 to 400 mesh". The claims of Groups IV and V do not require that the rice husk have a particle size of between 325 and 400 mesh, in fact claims 21 and 23 limit the rice husk to a particle size range of between 100 and 200 mesh. The special technical feature of Group V is the blending on fresh rice husk having a particle size range of 100 to 20

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mesh. Groups I, II, III, and IV have no such requirement because they can use carbonized rice husk.

3. This application contains claims directed to more than one species of the composite material (as an example see claim 10). These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Latex, thermoplastic resins, thermoset plastics, rubbers and elastomeric materials, conductive coating, printing inks, bitumen, and concrete

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. <u>The reply</u> must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

- 4. The claims are deemed to correspond to the species listed above in the following manner:
- 1) Composite material= latex (claim 9), 2) composite material=bitumen (claims 12-16),
- 3) composite material=thermoplastic resin (claims 17-18), 4) composite material=thermoset resin (claims 24-29), 5) composite material=rubber (claims 19-20, 22-23, and

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30-31), 6) composite material=ebonite NR (claim 21), and 7) composite material=concrete (claims 32-33)

The following claim(s) are generic: 1-8, 10-11, and 34-37.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for obvious reasons.

## Examiner Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (703) 308-0446 until 12/04/03; after 12/04/03 my new telephone number will be (571) 272-1117. This examiner can normally be reached on Monday through Thursday from 7:35 a.m. to 6:00 p.m. in the eastern time zone. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The centralized FAX machine number is (703) 872-9306. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0651. The receptionist is located on the 8<sup>th</sup> floor of Crystal Plaza 3 (e.g. CP-3) and will be the welcome point for all visitors to the building.

Joseph D. Anthony
Primary Patent Examiner
Art Unit 1714

MA Amberry

11/16/03